

(D. & S.). — A; B; E; F; G; H; K. *G. obscuratus* (D. & S.). — one at H on 9.viii.76. *Psodos coracina* (Esper). — in 1976 — 'wrong' year — the moth was out in good numbers on the Eastern Plateau but none was seen on the Braeriach side; in 1977 there were very good numbers on both plateaux; one isolated specimen seen at A by Sterling & Godfrey in 1977. *Dyscia fagaria* (Thun.). — A; B; G; K.

#### SPHINGIDAE

*Laothoe populi* (L.). — A; C; G; K; larvae on sallow at A and on aspen at E. *Deilephila elpenor* (L.). — K.

#### NOTODONTIDAE

*Cerura vinula* (L.). — K; larvae on sallow by Loch Gamhna. *Harpyia furcula* (Clerck). — A; K; larvae on sallow at E and near Loch an Eilein. *Notodonta dromedarius* (L.). — A; C; F; G; K; larvae on alder at B and F. *Eligmodonta ziczac* (L.). — K; larvae on sallow at B and E. *Pheosia gnoma* (Fab.). — A; B; C; E; F; G; K. *P. tremula* (Clerck). — K. *Ptilodon capucina* (L.). — A; C; F; G; K. *Odontosia carmelita* (Esper). — A; C; E; K.

#### LYMANTRIIDAE

*Dasychira fascelina* (L.). — A; C; K; larvae at C, E, G, in the Lairig, by the Allt Ruadh, at Achlean/Coire Garbhlach and in Glen Feshie to the Eidart. A very large percentage — 70% or more — of the larvae were parasitised.

#### ARCTIIDAE

*Parasemia plantaginis* (L.). — day-flying at B, in Glen Einich to 500 m, on the south side of Cairn Gorm at 1,150 m, in Coire Garbhlach and by the Allt Fhearnagan (between Achlean and Carn Ban Mor). *Arctia caja* (L.). — K. *Spilosoma luteum* (Hufn.) — K. *Phragmatobia fuliginosa* (L.). — E; F; larvae at A, by Allt Raudh and at Achlean; a pupa in Coire Garbhlach.

(To be continued)

## PRACTICAL HINTS — SEPTEMBER

Hibernating butterflies. — During the autumn, butterflies such as the Comma, Large and Small Tortoiseshell and Peacock may be captured and bred and kept through the winter months in a state of hibernation. To do this successfully they should be confined in a wooden half tub with a piece of gauze fastened securely over it. At first it should be kept in a sunny position and the butterflies fed daily with a weak solution of honey, sugar and water on a wad of cotten wool placed on top of the gauze. As the days shorten they will gradually stop feeding. The tub should then be tilted over on its side and positioned with the gauze close up to a north facing wall where it can be left undisturbed till the following spring (LIPSCOMB).

September is a fine time for the moth hunter. Larvae abound, plenty of choice endemic species are on the wing and round every corner lurks the chance of a rare migrant. Early in the month should not be too late to attract the Heath Rustic (*Xestia agathina*) to the lamp and blank moments may

be spent sweeping heather for larvae of the Beautiful Yellow Underwing (*Anarta myrtilli*). Care should be taken not to enclose the larvae in a plastic box if the foodplant is at all damp. Later in the month, the same terrain should produce larvae of two Pugs: *Eupithecia nanata* and *E. goosensata* (CHATELAIN).

Full-fed larvae of some hawkmoths, as *Agrius convolvuli* and *Hyles lineata livornica*, are inclined to wander extravagantly before pupation. To curb this I confine them in two-pound jam-jars which just hold sufficient compost (RICHARDSON).

Sugar on the coast should produce plenty of moths, including the Feathered Brindle (*Aporophyla australis*) and the Feathered Ranunculus (*Eumichtis lichenea*). Both come to light although the males of the latter species are late arrivals. On the Isle of Portland, imagines of the Beautiful Gothic (*Leucochlaena odites*) may usually be found in some numbers (CHATELAIN).

*Coenocalpe lapidata* will fly towards 5 p.m. in its haunts at Kinloch Rannoch and elsewhere, but was more easily found with a Tilley lamp at night, sitting on grass and herbage. Some noctuid larvae, as *Hyppa rectilinea* and *Iodia croceago* are inclined to eat through muslin sleeves. A second sleeve appears to check this. *H. rectilinea* larvae, treated thus, overwinter successfully on sallow. Larvae of *Meganola albula* winter successfully sleeved on raspberry (RICHARDSON).

During September, the larvae of the Greater Wax Moth (*Galleria mellonella* L.) may be found in bee hives. These must be obtained through co-operation with bee keepers who usually destroy any that they may find. If persuaded they may keep some back on the promise that they will not be allowed to escape, a tendency which is most marked in this species. The Lesser Wax Moth (*Achroia grisella* F.) is usually to be found only on the older combs, often in vacated hives (WATKINSON).

Robert Adkin described his method for rearing *Cydia funebrana* Treitschke as follows: He used a round tongue glass (but in these days a round or rectangular plastic box should serve equally well) and two pieces of thin wood as wide as the vessel is deep, and as long as the diameter, if round, or the diagonal if rectangular. With these he made a sandwich with about half an inch of sphagnum moss and tied them together with raffia. This was placed across the vessel, edge-ways up, and the infested plums placed in the side spaces. The rotting fruit should be removed after the larvae have passed into the moss for pupation, thus saving them from drowning in the plum juice. The vessel is covered with a piece of nylon stocking, and the adult moths awaited in the following June (JACOBS).

Brightly coloured larvae of the attractive local Pyralid *Evergestis extimalis* Scop. may be found in September feeding on the flowerheads and seeds of Wall Rocket (*Diplotaxis tenui-*

*folia*). The waste ground along the Thames estuary in Essex and Kent are good areas. The larvae hibernate in one cocoon and then appear to wander elsewhere early in the spring to pupate. Soon after hibernation, the material bearing their cocoons must therefore be placed in a stout container.

In late September and early October, the mines of *Phyllonorycter comparella* Dup. and the recently discovered *P. sagitella* Bjerk. may be found on white poplar and aspen respectively. The former species also feeds on black poplar. Unlike other species of *Phyllonorycter*, these two must be collected now since the adults emerge in early October and then hibernate (WATKINSON).

To those who propose to collect second brood *Nepticula* mines, I would suggest that they overhaul their breeding apparatus in good time, cleaning used tubes and preparing a supply of mixed sand and peat or of chopped sphagnum moss, sterilised by heating in a vessel suspended in a saucepan of boiling water.

*Nepticula* larvae as a general rule, spend a very short time in the mine, and they may have left and wandered away if time has to be spent in preparing quarters for them on return from a collecting trip. Before setting out, I have my breeding tubes standing ready with a supply of sand and peat mixed in a plastic bag.

More larvae may be accommodated in a tube if the unwanted part of the leaf be cut away with scissors. The mined portions being arranged round the side of the tube with the midrib end buried in the peat mixture. Keep the tubes corked until the larvae have left the mines, then cover tubes with a piece of nylon stocking, kept in place by a copper wire ring made by turning the wire once round the tube and twisting the ends together. When emergence time is near, replace the nylon with a square of glass. Be moderate with moistening, and stop at once should any mildew appear.

When imagines appear, open the tube by a closed window, and when the moth flies on to the window towards the light, cover it with a tube or pillbox into which a drop of ethyl acetate has been placed. When dead, it is ready for immediate setting with no rigor to contend with. September onwards should provide many species (JACOBS).

## NOTES AND OBSERVATIONS

SEXUAL DIMORPHISM IN *CARTEROCEPHALUS PALAEMON* L.  
— Last year whilst examining this skipper in its Scottish localities, I was surprised to note a difference in the sexes to which I can find no reference in the literature. The underside of the club of the antenna at its base is bright yellow in male and black in the female. The same distinction, so I have found subsequently, extends to English examples of this insect. Besides being rather striking, the difference appears to be quite constant and permits unequivocal sexual identification. — T. W. C. TOLMAN, 1 Clanfield Drive, Chandler's Ford, Hants. SO5 2HJ.